



## Main

Range of product	Modicon M221
Product or component type	Analogue input cartridge
Product compatibility	Modicon M221C
Analogue input number	2

## Complementary

Analogue input type	Thermocouple - 200...1000 °C with thermocouple J Thermocouple - 200...1300 °C with thermocouple K Thermocouple 0...1760 °C with thermocouple R Thermocouple 0...1760 °C with thermocouple S Thermocouple 0...1820 °C with thermocouple B Thermocouple - 200...400 °C with thermocouple T Thermocouple - 200...1300 °C with thermocouple N Thermocouple - 200...800 °C with thermocouple E Thermocouple 0...2315 °C with thermocouple C Ni 100/Ni 1000 temperature probe - 60...180 °C Pt 100 temperature probe - 200...850 °C Pt 1000 temperature probe - 200...600 °C
Analogue input resolution	14 bits
LSB value	0.1 °C
Sampling duration	125 Ms, analogue input type: thermocouple 250 ms, analogue input type: temperature probe
Absolute accuracy error	+/- 0.1 % of full scale at 25 °C for Pt 100/Pt 1000, Ni 100/ Ni 1000 temperature probe +/- 0.4 % of full scale at 25 °C for thermocouple K - 200...0 °C +/- 0.1 % of full scale at 25 °C for thermocouple K 0...1300 °C +/- 0.4 % of full scale at 25 °C for thermocouple J - 200...0 °C +/- 0.1 % of full scale at 25 °C for thermocouple J 0...1000 °C +/- 0.4 % of full scale at 25 °C for thermocouple E - 200...0 °C +/- 0.1 % of full scale at 25 °C for thermocouple E 0...800 °C +/- 0.4 % of full scale at 25 °C for thermocouple T - 200...0 °C +/- 0.1 % of full scale at 25 °C for thermocouple T 0...400 °C +/- 0.4 % of full scale at 25 °C for thermocouple N - 200...0 °C +/- 0.1 % of full scale at 25 °C for thermocouple N 0...1300 °C +/- 6 °C at 25 °C for thermocouple R, S 0...200 °C +/- 0.1 % of full scale at 25 °C for thermocouple R, S 200...1760 °C +/- 0.1 % of full scale at 25 °C for thermocouple C 0...2315 °C
Temperature drift	+/- 0.02 %FS/°C
Repeat accuracy	+/- 0.5 %FS
Non-linearity	+/- 0.01 %FS
Cross talk	<= 1 LSB
Type of cable	Twisted shielded pairs cable
Electrical connection	3 x 1.5 mm <sup>2</sup> 2 screw terminal blocks with pitch 3.81 mm adjustment for inputs
Maximum cable distance between devices	Twisted shielded pairs cable: <30 m for input
Insulation	Non-insulated between analogue input and internal logic
Height	41 mm
Depth	15 mm

Width	35 mm
Net weight	0.015 kg
Input impedance	>= 1 MOhm

## Environment

Immunity to microbreaks	10 ms
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## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.5 cm
Package 1 Width	7.0 cm
Package 1 Length	4.6 cm
Package 1 Weight	20.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	75
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	3.324 kg
Unit Type of Package 3	P12
Number of Units in Package 3	2400
Package 3 Height	100 cm
Package 3 Width	125 cm
Package 3 Length	55 cm
Package 3 Weight	75 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
PVC free	Yes
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>